

National Birth Defects Prevention Study Centers for Birth Defects Research and Prevention

Tracking and Tracing Procedures

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Arkansas Center for Birth Defects Research and Prevention

1. Arkansas sends initial study correspondence (i.e., introductory letter, money order, brochure, calendar, Frequently Asked Questions, Dietary Assessment Response List, address correction card) to subjects by **Federal Express (3-day)** whenever the address and telephone information are adequate. There is a 5-day waiting period for Fed-Ex before attempting the initial telephone contact calls to subjects. This allows time for the subjects to receive and review the letters before speaking with an interviewer.
2. When the address only contains a PO box or incomplete information or when the telephone number is missing, Arkansas sends the initial correspondence by **U.S. Mail**. These packages are marked **“Forwarding and Address Correction Requested”**. When sending packets via U.S. Mail, there is a 10-day waiting period before attempting the initial telephone contact calls to subjects. Initial correspondence that is resent is sent via U.S. Mail or Federal Express (3-day).
3. When the advanced letters are returned as undeliverable, the subject’s **home telephone number** is called to verify or obtain an updated address. The advance mail package is resent to the corrected address by Fed-Ex if new address is a street address or by U.S. Mail if new address contains a PO box or is incomplete. A new 5- or 10-day waiting period begins respectively.
4. If the home telephone number is disconnected, not current, or not available, all **alternate numbers** (employer, message, relatives, friends, etc.) noted on the abstract are attempted.
5. If unable to obtain address or phone number with previous contacts, the **Arkansas Children’s Hospital electronic admissions system, Medi-Tech** via computer are checked for change of address and/or phone number.
6. If unable to obtain new information with previous attempts, **local phone directory, and/or call directory assistance** is checked to obtain an updated telephone number. We are also using the following free sites in our local tracing: **AnyWho.com , Dogpile.com, theultimates.com/white, Reversesearch.com, and Argali.com.**
7. If unable to obtain new information with previous attempts, the **primary care physician’s (PCP) office or clinic** listed in the subject’s abstract or medical records is contacted. Ask for any different information regarding subject’s address and phone number. If no new numbers or address available from the PCP, with the assistance of the abstract team the **birth hospital** is called for any different contact information.
8. Once all local efforts have failed to locate subject; the subject’s name and/or social security number are submitted to the **commercial tracing agency**. We are currently using **Intelius** where results can be instant (however the results aren’t in chronological order of last know address). A new introductory packet is mailed if a new address is obtained. All new phone numbers are attempted.
9. If no new information is obtained with the commercial tracing agency, subject is placed in “Lost to Contact” status for one month. After a 1-month waiting period, **reactivate local and/or commercial tracking and tracing procedures as stated in steps 4-8**. Continue this pattern until final disposition obtained or subject ages out of study.

Arkansas is not searching the Department of Motor Vehicle records at this time. Medical records are re-abstracted on a continuous basis through birth updates for the regular surveillance system and updated address information and/or additional telephone numbers are shared with the Interview Team which performs the tracking and tracing.

Arkansas is not conducting the last few supplementary steps outlined in the CDC protocol, i.e., contacting professional or occupational regulatory agencies, contacting state agencies, or conducting in-person tracing. However, if Arkansas determines that a subject does not have a phone, but is willing to participate, the interviewer schedules a time with the subject to travel to the subject and conduct the interview in-person.

Battelle: Atlanta and North Carolina

This document summarizes the primary tracing resources and databases used by Battelle and the sites for the Atlanta and North Carolina NBDPS studies. Battelle is following all of the first eight steps, while the Atlanta and/or North Carolina sites conduct steps 9 through 11. At this point, neither Battelle nor the Atlanta or North Carolina sites have been conducting the last few supplementary steps, i.e., contacting professional or occupational regulatory agencies or conducting in-person tracing. Battelle previously conducted a pilot test of in-person tracing in the Atlanta area, but CDC did not determine it to be helpful for finding Atlanta subjects.

Tracing Resources Used by Battelle for Atlanta and North Carolina Studies:

1. Instead of **certified mail**, Battelle sends initial study correspondence by **Federal Express** whenever address and telephone information are adequate. (This works for most mailings.) When address only contains PO box or incomplete information or when telephone number is missing, Battelle sends initial correspondence by **U.S. Priority Mail** (express). Battelle requests delivery confirmation and address change information when needed.
 - Before mailings, to verify spelling of street address and that address is within appropriate “numeric range”, Battelle checks the U.S. Postal Service website: www.usps.com
2. For letters sent by first class U.S. Postal Service, Battelle includes the phrase “**Forwarding and Address Correction Requested**” on envelopes sent to subjects. If subject has moved, but is still within the time period (12 months) for first-class mail to be forwarded, this will result in receipt of a card with subject’s new address listed. Service costs \$0.75 per address.
3. If initial correspondence is returned as undeliverable, Battelle calls the **home telephone number** provided by the site for the subject to obtain an updated address.
4. If the home telephone number is not current or not available, Battelle calls **directory assistance** to obtain an updated home telephone number.
 - (Area Code) 555-1212
5. If directory assistance cannot help, Battelle searches **other telephone directories**, bound and electronic, in the subject’s last known city of residence for individuals with a last name that matches the subject’s maiden name or last name. Battelle calls each individual (if a reasonable number) or a predefined subset of individuals to locate the subject’s address and/or home telephone number. When needed, Battelle follows “criss cross” tracing procedures, e.g., searching by the subject’s addresses and/or telephone numbers.
 - Atlanta and North Carolina: **ProCD electronic national directories**, CD ROM used by the Battelle/Durham office.
 Company: InfoUSA
 Product: ProCD SelectPhone
 Deluxe edition: \$299.95 per year, now includes quarterly updates.
 2000 Edition just came out.
 800-992-3766 (Sue Hennings: ext. 4396)
 - Atlanta and North Carolina: **Intelius**, a search engine used by the Battelle/Durham office. It is an individual reference service that uses public records and publicly available information as data sources for personal (name/address), telephone, Social Security, and criminal background searches. Founded in January 2003 by former InfoSpace and Microsoft executives. (See details in Attachment below.)
 Cost: \$199.95 for 1000 personal searches within a 12-month period.
 - Atlanta, North Carolina: **PhoneDisc PowerFinder electronic directories**, available through the Battelle/St. Louis office. This national directory contains 115 million residential and business listings

indexed by name, address, phone number, business type and SIC code.

- Phone Disc – http://www.epinions.com/50603550-Powerfinder_USA_ONE_
 - Atlanta and North Carolina: **Internet directories**, for example:
Anywho.com (through Google) – <http://www.anywho.com/>
Reference USA – <http://new.referenceusa.com>
Switchboard.com (through Google)
Whitepages.com and Yellowpages.com
Yahoo! People Search: <http://people.yahoo.com/>
6. If an updated address and/or home telephone number is not current or not available, Battelle employs a **commercial tracing service**. These services are most effective when the subject's social security number is used.
 - Atlanta and North Carolina: **Trans Union credit reporting agency**. Searches conducted by Battelle/St. Louis office, primarily using the following Trans Union options:
 - TRACEplus uses Trans Union's national database to search on social security number to locate or confirm a current address, and checks validity of the social security number. Provides information about current and former addresses, other names used, age, employment information, and occasionally non-published phone numbers.
 - RE-TRACE is a reverse of the search done by TRACEplus. When current or former address is known, the social security number and all information found in TRACEplus can be obtained. This is useful in locating individuals who have a credit history but do not routinely report change of address to the post office or other businesses.
 - Cost for credit searches is about \$4.65 fee for complete Trans Union searches, plus staff time to conduct searches.
 7. If an updated address and/or home telephone number is not current or not available, Battelle calls the **work telephone number** listed in the subject's abstract or medical records.
 8. If the work telephone number is not current or not available, Battelle calls a contact or **family member's telephone number** listed in the subject's abstract or medical records. **Other contact persons** listed in the abstract/medical records (loaded in our tracking system) also are called.

Tracing Resources Used by Atlanta Personnel:

9. Steps carried out by Atlanta sites: **Re-abstract the subject's medical records** after a specified time period (e.g., 3 months) to search for updated address information and/or additional telephone numbers (e.g., work telephone number). Some Centers have access to **electronic master birth files** that can be searched using sorting and filtering routines to help identify subjects, find new information, and help abstractors locate original cases. However, Atlanta primarily relies on hardcopy records and must visit individual hospitals to obtain medical records; their past efforts yielded about 40% new information or addresses for the re-traced subjects.
10. Steps carried out by Atlanta site: If a family member's telephone number is not current or not available, call the **physician's office or clinic** listed in the subject's abstract or medical records. For index infants that are living, call the pediatrician listed. For index infants that are deceased, call the obstetrician or family practitioner listed. Atlanta does not check with private offices, but does abstract records at the **two pediatric hospitals in the Atlanta area** to see if the child has had any admissions. At this point, North Carolina does not check with these offices or clinics.
11. Steps carried out by North Carolina site: Contact **state agencies** to obtain the subject's address and/or home telephone number. Letters of agreement may need to be established with each agency. North Carolina's

SCHS in Raleigh uses some state databases to look for additional phone and/or address information. (At this point, Atlanta does not check with these agencies.)

Tracing Resources Not Used by Battelle, Atlanta, or North Carolina:

12. If an updated address and/or home telephone number is not current or not available, search **Department of Motor Vehicle** records. At this point, Atlanta and North Carolina do not check DMV files (although Georgia DMV also issues an ID card). (New York staff who carried out DMV searches reported that the search mechanism was a “primitive” tool. Searches were time-consuming because only the first few letters of first and last name are entered, resulting in long lists to review for potential matches. Entering Birth date helps but it was not possible to tell whether the addresses are new. Usually New York did not find much information with this method.)
13. If an address is not current or not available, contact the **U.S. Post Office** for the subject’s last-known-address zipcode. For example, the Center submits a formal request, in writing with signatures, to the local post office for the zipcode of the last known address. This process is lengthy but may turn up forwarding information for subjects. The process must be conducted in writing, not informal telephone calls to the post office or postman. At this point, Atlanta and NC do not check with the Post Office.
14. If an address is not current, contact the **city’s office of property deeds and taxes to identify the landlord** for the subject’s last known address. This may be useful when the subject does not live in an apartment complex, but lived in rented property. **Criss-cross neighborhood directories sometimes can provide information about landlords for apartment complexes.** Then contact the landlord to find forwarding information about the subject. (At CDC’s request, Battelle discontinued contacting neighbors and landlords of apartment complexes about the subjects.)
15. If the request for an updated address and home telephone number is refused from a physician’s office or clinic, identify a **contact person at the physician’s office or clinic** to whom you can send the initial study correspondence and who will subsequently forward the correspondence to the subject.
OR: If a physician’s telephone number is not current or not available, call the **billing department at the birth hospital.**
16. If an updated address and/or home telephone number is not current or not available, contact a **professional or occupational regulatory agency**. Letters of agreement may need to be established with each agency. At this point, Atlanta and North Carolina do not check with these agencies.
17. Conduct **in-person tracing in the field**, either by interviewers/tracers or private investigators, to obtain subject’s address and/or home telephone number. Battelle previously conducted a pilot test of in-person tracing in the Atlanta area, but it was not helpful for finding subjects.

ATTACHMENT: TRACING RESOURCES

TRANS UNION:

Trans Union has been a primary source for locating respondents since the Battelle/St. Louis office became a subscriber to the service in 1990. This is an on-line service and is accessed by modem. TRACEplus, RE-TRACE, HAWK and ATLAS are the Trans Union systems we now use. We are charged per report.

TRACEplus is a search on the social security number to locate or confirm a current address of a respondent. With TRACEplus we are able to pull information from the Social Security file of Trans Union's national database. Information can be obtained about current and former addresses, other names used, age, employment information, and occasionally non-published phone numbers. When TRACEplus is accessed, Trans Union's Trans Alert System is also activated. This system checks the validity of a social security number being processed. If the number has not been issued by the Social Security Administration, a message will appear on the report advising us of this.

RE-TRACE is a reverse of the search done by TRACEplus. When a current or former address is known, the social security number and all the information found in TRACEplus can be obtained. This has been very useful in locating individuals who have a credit history but do not routinely report change of address to the post office or other businesses.

HAWK matches an individual's social security number against the Social Security Administration's Death Master File. If a death claim has been filed, this information will appear on the TRACEplus report, along with the month and year the claim was filed with the Social Security Administration. HAWK also allows for searches of death claims filed without reporting names and addresses. This is an inexpensive way to determine vital status without receiving confirmation of name and address on live subjects.

ATLAS or Address Telephone Lookup Access System is the third system provided by Trans Union. ATLAS uses a separate database from TRACEplus or RE-TRACE. Four basic types of reports can be obtained through ATLAS. They are:

- **Subject Verification Reports:** SV reports concentrate on the individual subject. It returns information based on name and last known address. In addition to returning the address, phone number, type of dwelling and date of residency, the same information can be obtained for nearby neighbors. We have the option to have 0, 5, or 10 (SV00, SV05, or SV10) neighbors returned with this report. We may also choose to specify subject verification with change of address only (SVCA) or with **either** change of address or input address verified (SVOC). The advantage of option selection is avoiding receipt of a report with information we already have. With Trans Union's ATLAS reports, a "no hit" is a "no charge".
- **Address Verification Reports:** AV reports verify a given address. In addition to returning the name, address and phone number of the current occupant living at the input address, the reports also provide us with the type of dwelling unit and date of residence. We also have the option of receiving the same type of information on 5, 10 or 20 (AV05, AV10, or AV20) nearby neighbors. This is very useful if the study allows for tracers to contact current or former neighbors when attempting to locate a subject.
- **Phone Number Ownership Reports:** This ATLAS report (PN00) provides us with the listed name and address for a given phone number.
- **Surname Searches:** These reports are designed to help identify a current address when only last name and general idea of location are known. We can request 10, 20, 35 or 50 surnames to be returned and can narrow the search by including the first initial, if known. We are able to conduct the search in a given area by selecting to search on a zip code (SZ), city (SC), state (SS) or, if the name is very unusual, a national search

(SN50) can be conducted. The national search always begins on the east coast with the state of Maine and follows a prescribed order until 50 people with that same surname have been found or until the search has been conducted in all 50 states, whichever occurs first.

PHONEDISC:

This resource is available through the Battelle/St. Louis office. PhoneDisc PowerFinder is a six-disc set containing 115 million residential and business listings indexed by name, address, phone number, business type and SIC code. Searches can be made on the surname alone or can be narrowed down by including first name and/or middle initial. If more information is known, the search can be limited to a state, city, street, zip code or area code. Searches can also be made on a given address to identify the name and phone number of the current residents as well as the names, addresses and phone numbers of neighbors. By indexing on the phone number, a check can be made to see in whose name/s the number is listed. Since PhoneDisc costs are incurred only at the time of purchase, this has been a very useful and economical tool in tracing. We have found, however, that the information can be out-of-date and additional searches through Trans Union may be necessary. The advantage to finding even out-of-date information is that it can inexpensively give us a starting point for our search, which reduces the number of reports required from Trans Union.

INTELIUS:

This resource is available through the Battelle/Durham office. Intelius is an individual reference service which uses public records and publicly available information as data sources for personal (name/address), telephone, Social Security, and criminal background searches. Data sources include records from courthouses, county and other government office in addition to other publicly available records. Search information lists the date on which the information was last verified by county, state, and federal public record databases as being accurate and current. Cell phone data may appear if listed in public records. Unlisted telephone numbers may also appear again, if listed in public records sources. Founded in January 2003 by former InfoSpace and Microsoft executives, Intelius is used by clients to locate people, verify identities, manage risk, and ensure personal safety. Examples of the product searches follow.

Personal search by name includes the following information:

- Name of person entered and name(s) of persons (middle initials included) listed as living at the same address during the same time period.
- Approximate age if available, of persons listed.
- Date of birth of persons listed, if available.
- Address.
- Telephone, if available.
- Date address information was last verified by county, government, and public records.

Personal search by address includes:

- Names of persons listed as having lived at said address.
- Approximate age if available, of persons listed.
- Date of birth of persons listed, if available.
- Telephone, if available.
- Date address information was last verified by county, government, and public records.

Search by Social Security number (Background Report, additional cost to personal search), include:

- Name linking to Social Security number entered.
- Alias' used with Social Security number entered.
- Address last linked to Social Security number listed.
- Telephone number last linked to Social number listed (if available).
- Date of Birth (if available).
- Approximate age (if available).
- Address history for Social Security number including:

-telephone number associated with each address (if available), when the address/Social link was first reported, and the date of your current background search.

-Telephone numbers may include a “confirmed connected” status note.

Cost: \$199.95 for 1000 personal searches within a 12-month period.

\$119.95 for 500 personal searches within a 12-month period.

Additional charges for Social Security searches: 100 Social Security number searches with no time-limit costs \$2.00 per search or, \$200.

California Birth Defects Monitoring Program

CBDMP uses the following tracing resources:

1. Medical Records in Hospitals and Outpatient Clinics

The CBDMP Registry routinely collects information on children with birth defects from medical records as mandated by State law. Information on contacts, e.g. physicians, relatives, employers, etc. is also collected and used in locating participants for a study. Contact information from medical records extracted by the Data Collection Specialists (DCS) is entered into the CBDMP tracking program called Interview Central (IC). From there, the interviewers attempt to contact the subjects by phone and will try all available numbers until they are located. If no number leads to the subject, then the interviewers call all numbers listed for relatives and medical offices. If these numbers have no new information, the interviewer will re-send the interview letter to the subject if there is a residential address which has not been invalidated.

2. Post Office

All correspondence with study subjects will be labeled “Confidential” and “Return Service Requested”. Returned letters often have an address correction form on them from the post office with new information listed. This information is entered into IC and another letter is sent to the new address.

3. WIC and RTF

If there is still no new contact information, we send a list of the subjects’ information to the Women, Infants and Children’s Organization (WIC).

WIC is able to search for new information from the mother’s name, date of birth, and social security number as well as the baby’s name and date of birth. Our last tracing option is to return the information to the field (RTF). This sends the information back to the Data Collection Specialists to begin the process over again.

4. Public Records

CBDMP has authorized access to the Department of Motor Vehicles (DMV) databases where we are able to search for new contact information by either their California driver license number or by their name.

5. Online Database Account

CBDMP has an account with Merlin Information Services where we are able to search for new information by the subjects name, address, city, state, telephone number, and social security number.

6. Public Internet Tracing Websites

CBDMP uses the following free public websites to look for a subjects’ contact information by name, address, and phone number:

- Zabasearch.com
- Theultimates.com (which includes Infospace, Dogpile, Whitepages, Yahoo, Whowhere, and Switchboard)
- Superpages.com

Iowa/New York Centers for Birth Defects Research and Prevention

Iowa performs the tracking and tracing for their Center and New York and uses the following steps for tracing (not necessarily in this order):

1. Include the phrase “**Address Service Requested**” on envelopes sent to subjects. If subject has moved, but is still within the time period (12 months) for first-class mail to be forwarded, this will result in receipt of a card with subject’s new address listed. If the subject had moved more than 12 months ago or if the mail is undeliverable, the post office returns the mail with the reason for non-delivery attached to the envelope. Service costs \$0.70 per address.
2. If initial correspondence is returned as undeliverable, call the **home telephone number** listed for the subject to obtain an updated address.
3. If the home telephone number is not current or not available, call **directory assistance** to obtain an updated home telephone number.
4. If an updated home telephone number is obtained from directory assistance, call the home telephone number or search **Internet directories** such as Infobel.com, Google.com, White Pages.com, etc. to obtain an updated address.
OR: If an updated home telephone number is not obtained from directory assistance, search Internet directories to obtain an updated address and/or home telephone number.
5. If an updated address and/or home telephone number is not current or not available, search **State of Iowa Voter Registration** records.
6. If an updated address and/or home telephone number is not current or not available, call all **other telephone numbers** listed in the subject’s abstract or medical records.
7. On an approximately bi-monthly basis, IA submits the names and addresses of ALL subjects undergoing recruitment to a **Commercial Tracing Service** called Mailnet Services, Inc. located on the Internet at <http://listcleanup.com>. The tracing service matches mailing list addresses to 48 months of change of address information for families and individuals. The tracing service provides the effective date of the new address and provides telephone numbers and updated area codes.
8. Send a Decision Letter through **certified mail with delivery confirmation** to subject’s last known address.
9. If subject has been traced with all steps and is still unlocatable, set to “Trace Delay” status for three months. After this time, trace the subject with all steps listed above. Continue “Trace Delay” cycle until the subject is located or ages out of the study. New York will be notified that subject can not be located. New York will take the following steps.
10. Contact listed physician for updated address or phone number.
11. Search **Department of Motor Vehicle** records.

Massachusetts Center for Birth Defects Research and Prevention

1. Letters are marked with “Forward and Address Correction Requested.”
2. On the same day that letters are mailed to subjects (or day before), contact information is sent to SEU electronically (through the SDN) and a hard copy is mailed to Susan Littlefield, the nurse interviewer. Currently, fields sent electronically are: Mother’s name, address, phone, ID, whether mom is Hispanic or not, baby’s name, baby’s date of birth, EDD, father’s name, alternate phone numbers, other contacts, and date letter sent.
3. Carol and Susan are notified by email at least 24 hours prior to the day that the mother introduction letters are mailed.
4. Susan will call mother’s phone number(s), prioritizing cohort one year prior to date sent.
5. If number is disconnected or not in service, Susan will try directory assistance for the number.
6. If calling directory assistance is unsuccessful, Susan will fax id and incorrect number to MDPH.
7. First, MDPH will double-check the medical record abstraction form for errors and for: mother’s work number, father’s name and home/work numbers, and other contact information, in case there have been any.
8. MDPH will check information against birth certificate data.
9. MDPH will try Internet “people search” directories and reverse search services. If information is found, we will fax this to Susan. If information is not found, it remains in the tracing “pending” file and is periodically rechecked every few weeks
10. If letter is returned undeliverable, this information is faxed to Susan. We check with her to see if she was still able to reach mother through a working phone number and therefore if she might have a new address. MDPH will also take the steps listed in #7 through #11 to obtain a new address. If one is found MDPH informs Susan that we are sending out a new letter.
11. WIC tracing, to be used when other approaches have been unsuccessful. On a bimonthly basis subjects’ names and old address are given to MDPH WIC program on a floppy disk with a form letter. The form letter requests that mothers contact us to participate in the study. WIC program sends form letter to subjects for whom they find an updated address. Initial results indicated WIC had identified more recent addresses/phones for 1/3 of names sent. Ongoing.
12. All tracing efforts are logged into a Tracing Database System, where forms to be faxed to the interviewer can be automatically printed.
13. Whenever we come across a new piece of contact information that comes in after mom introduction letters were sent we send the information to Susan on the enclosed “Update form for Study Subjects.”

UPDATE FORM FOR STUDY SUBJECTS

FROM:___Rebecca Lovering_____

TO:___ Susan Littlefield_____

DATE:___ ____/____/____06____

INFANT'S NAME: __ _____

MOTHER'S NAME: _____

CDCID: **Infant's DOB:**

Utah Center for Birth Defects Research

1. Subjects address and phone number are verified using the State Assistance Database. If subject is not in that database, information is verified using one other of the following search databases: www.whitepages.com, www.dexonline.com, or USIIS (Utah Statewide Immunization Information System)
2. Utah will send initial study correspondence (i.e., introductory letter, brochure, calendar, Dietary Assessment Response List, address correction card) to subjects by Priority Mail whenever the address information is adequate. There is a 10 day waiting period for Priority Mail before attempting the initial telephone contact calls to subjects. This allows time for the subjects to receive and review the letters before speaking with an interviewer.
3. When advanced letters are returned with a forwarding address, letter is resent to updated address.
4. When the advanced letters are returned as undeliverable, the address is traced using the following search databases: State Assistance Database, www.whitepages.com, www.dexonline.com, USIIS.
5. If unable to find address using search databases, the subject's home telephone number is called to verify or obtain an updated address. For advanced letters returned as "undeliverable" with an address correction, or a correct address is provided by an alternate contact, or a telephone contact establishes that the subject has not received the advance letter, the advance mail package is resent to the corrected address by Priority Mail.
6. If subjects home telephone number is disconnected, not current, or not available after the 10 day waiting period, the home phone number is traced using the following search databases: local phone directory assistance, State Assistance Database, www.whitepages.com, www.dexonline.com, www.theultimates.com, USIIS.
7. If unable to find subjects phone number using search databases, a no phone letter is sent to the verified, adequate address.
8. If unable to find subjects address and/or home phone number, all alternate contacts noted on the abstract are attempted.
9. If unable to find subjects address and/or home phone number using all search databases; State Assistance Database, local directory assistance, www.whitepages.com, www.dexonline.com, USSIS, www.ussearch.com, www.theultimates.com, subject is placed in tracing. All tracing steps are repeated periodically until new information is found or they are timed out of study.

Texas Center for Birth Defects Research

1. Public Policy Research Institute (PPRI) receives respondent information from the Texas Department of Health. Before invitational packets are mailed out, the addresses are run through a program called **Smart Mailer** that verifies if the address is deliverable. It also checks to see if that address has a new forwarding address. If it has a new forwarding address, we will use the new address for mailing.
2. Invitational packets are sent to the respondent. The envelope is stamped with **Address Service Requested**. The packets contain an **Address Correction Form** so the respondent can correct their address and/or phone number and can mail it back to PPRI in a pre-paid envelope. The packet also has the **toll-free phone number** so respondents can call PPRI to do interview or schedule an appointment.
3. After a 10 day waiting period, phone calls are made to all phone numbers provided. If we have a phone number of a friend or relative we will try to obtain the respondent's phone number and/or leave our toll-free phone number.
4. If no contact is made or the phone numbers are bad, then tracking procedures are started. First, the address is looked in the **Reverse Address Search** using **555-1212.com**.
5. If a new phone number is obtained, the phone number is called to verify if correct phone number for respondent. If it is a good phone number, we will start or schedule interview or send out a new invitational packet if respondent has not received it.
6. If no new phone number is found, then respondent's name will be looked up in the **Residential Listings/Directory Assistance** using **555-1212.com**. If new phone number is found, then follow step 5.
7. If no new information is obtained from 555-1212.com, then the respondent will be looked up in the **Medicaid Database** for current address. Respondent can be searched by name and/or social security number. If a new address is found, then it will be run through **Reverse Address Search** using **555-1212.com**. If new phone number is found, then follow step 5. If a more current address is found, then a new packet will be mailed to respondent and we will start at step 1 again.
8. If no new information is obtained from Medicaid, then the respondent will be looked up in **Merlin Information Services** for new address and/or phone number. Respondent can be searched by name, address, and/or social security number. If a new address is found without a phone number, then it will be run through **Reverse Address Search** using **555-1212.com**. If new phone number is found, then follow step 5.
9. If no new information is obtained from Merlin, then the respondent will be looked up in **Intelius**. Respondent can be searched by name, address, and/or social security number. If a new address is found without a phone number, then it will be run through **Reverse Address Search** using **555-1212.com**. If new phone number is found, then follow step 5.
10. If no new information is obtained, respondent will be put in the "Dead Ends" folder for approximately 1-2 months and then the tracking procedures are initiated again.

National Birth Defects Prevention Study
Centers for Birth Defects Research and Prevention
Tracking and Tracing Protocol:

Contacting, Scheduling, and Time Frames

(Based on CDC/Atlanta Center Protocols)

January 23, 2004

Survey research requires a high participation rate to produce valid research results. A number of approaches are needed to achieve high participation rates. First, we need to locate the potential participants. Second, we need to encourage as many subjects as possible to participate. This Tracking and Tracing Protocol addresses these needs through guidelines for contacting, scheduling, and time frames to be used across the ten Centers participating in the National Birth Defects Prevention Study. The study being carried out by the Centers for Birth Defects Research and Prevention (the Centers) includes Atlanta (Georgia), Arkansas, California, Iowa, Massachusetts, New Jersey, New York, North Carolina, Texas, and Utah. Scripts contained in other sections of the Interviewer Manual describe what interviewers should say when contacting subjects or contact persons.

Although this tracking protocol refers to an automated electronic system, a paper and pencil system could be used instead. The attachments to this document present suggestions for contact outcome categories (Attachments A and B) and a glossary of terms (Attachment C) previously used by Battelle for tracking purposes. Use of these terms is optional and is not required for the Centers.

Eligibility of Subjects

For most of the Centers, eligible infants must be born on or after October 1, 1997. Arkansas and New Jersey Centers began ascertaining eligibility on or after January 1, 1998, while North Carolina and Utah Centers began ascertaining eligibility on or after January 1, 2003.

Time Frame of Study

The goal is to interview subjects (mothers of the infants) at an **average of 6 months** from the estimated date of confinement (EDC) or estimated due date (EDD) from medical records. For full-term infants, the EDC (or EDD) will usually correspond with the infant's date of birth (DOIB). For stillbirths, elective terminations, and pre-term infants, the interview should occur at an average of 6 months from the EDC (or EDD). The **minimum time frame from EDC (or EDD) to interview is 6 weeks**; do not call anyone before 6 weeks of EDC (or EDD). The maximum time frame to obtain an interview is **24 months** from EDC (or EDD). (The 24-month time frame became effective in September 1999. Previously, the deadline was 15 months from EDD.) If the infant has died, it is appropriate to wait longer than 6 weeks to make the first call. Interviewers must be sensitive to the family's needs and the mother's feelings when determining the waiting period.

Centers may **use "30 days" to define "one month" in calculations** for number of months from EDC (or EDD). For example, the 24-month deadline would be calculated as 720 days (30 days X 24 months). The last day to conduct an interview would be the 721st day after the EDC (or EDD).

Physician Contact Schedules

Some of the Centers will contact each subject's physician by letter with return receipt requested to inform them of our

plans to interview one or more of their patients and to ask if there is any reason we should not contact their patient(s) for an interview. If, **within 21 days**, the physician does not indicate a reason not to contact the patient, projects will initiate contact with the mothers by an introductory letter.

Advance Mailings to Subjects

After notification that physician approval was received, projects will mail the advance mail packages (i.e., introductory letter, human subjects' fact sheet, brochure, calendar, Dietary Assessment Response List, and advance \$20 money order) to subjects. Letters will be marked "Return Service Requested" to request return of first class item with address correction and reason not deliverable. Advance letters may be sent **about 4 to 6 weeks after the EDC (or EDD)**. Letters sent by regular U.S. mail will be placed in a 10-day waiting period, while letters sent by express mail may have a shorter waiting period of 2 to 3 days. There will be a **2-day to 10-day waiting period** (depending on how the advance letter is mailed) before attempting the initial telephone contact calls to subjects. This allows time for subjects to receive and review the letters before speaking with an interviewer. There is a **minimum 6-week time frame from EDC (or EDD) to call the subject**; do not call anyone before 6 weeks of EDC (or EDD).

For advance letters returned as "undeliverable" with an address correction, the project should re-send the advance mail package to the corrected address, and begin a new waiting period.

If a telephone contact establishes that the subject has not received the advance letter, the project should re-send the letter to the corrected address, and begin a new waiting period.

There is no limit on the number of advance letters sent to subjects. However, generally no more than two advance \$20 money orders will be sent to a subject.

Tracing Procedures

Primary Tracing Procedures: The Centers established the following Primary Tracing Procedures, and agreed to implement the first nine steps. The steps will be evaluated at six months.

18. Include the phrase "**Forwarding and Address Correction Requested**" on envelopes sent to subjects. If subject has moved, but is still within the time period (12 months) for first-class mail to be forwarded, this will result in receipt of a card with the subject's new address listed. This service costs \$0.50 per address.
19. If the initial correspondence is returned as undeliverable, call the **home telephone number** listed for the subject to obtain an updated address.
20. If the home telephone number is not current or not available, call **directory assistance** to obtain an updated home telephone number.
21. If an updated home telephone number is obtained from directory assistance, call the **home telephone number** or search **Internet directories** to obtain an updated address.
OR: If an updated home telephone number is not obtained from directory assistance, search **Internet directories** to obtain an updated address and/or home telephone number.
22. If an updated address and/or home telephone number is not current or not available, search **Department of Motor Vehicle** records.
23. If an updated address and/or home telephone number is not current or not available, call the **work telephone**

number listed in the subject's abstract or medical records.

24. If the work telephone number is not current or not available, call a **family member's telephone number** listed in the subject's abstract or medical records.
25. If a family member's telephone number is not current or not available, call the **physician's office or clinic** listed in the subject's abstract or medical records. For index infants that are living, call the pediatrician listed. For index infants that are deceased, call the obstetrician or family practitioner listed.
26. If the request for an updated address and/or home telephone number is refused from a physician's office or clinic, identify a **contact person at the office** or clinic to whom you can send the initial study correspondence and show will subsequently forward the correspondence to the subject.
OR: If a physician's telephone number is not current or not available, call the **billing department at the birth hospital**.
27. If an updated address and/or home telephone number is not current or not available, contact a **professional or occupational regulatory agency**.
28. If an updated address and/or home telephone number is not current or not available, contact a **commercial tracing service**. These services cost about \$50/subject and are most effective when the subject's social security number is used.

Supplemental Tracing Procedures: The following Supplemental Tracing Procedures may be used if a current address and/or home telephone number cannot be obtained using the primary procedures. The supplemental steps are in no specific order of preference.

1. Send initial study correspondence by **certified mail**.
2. **Re-abstract** the subject's medical records after a specified time period (e.g., 3 months) to search for updated address information and/or additional telephone numbers (e.g., work telephone number).
3. Search **telephone directories**, either bound or electronic, in the subject's last known city of residence for individuals with a last name that matches the subjects maiden name or last name. Call each individual (if a reasonable number) or a predefined subset of individuals to locate the subject's address and/or home telephone number.
4. Contact **state agencies** to obtain the subject's address and/or home telephone number.
5. Conduct **in-person tracing**, either by interviewers/tracers or private investigators, to obtain subject's address and/or home telephone number.

Telephone Contacts

Telephone calls to establish contact with subjects may be conducted during morning, afternoon, and evening hours on weekdays and weekends. The initial contact and callback routine should follow the scheduling priorities outlined here. Times are local time for the respondent.

Time	Mon. – Fri.	Sat. – Sun.
9:00 AM – 12:00 Noon	Period A	Period D 11:00 AM – 7:00 PM
12:00 Noon – 5:00 PM	Period B	
5:00 PM – 8:30 PM	Period C	

The week is separated into five time periods (A, B, C, and D) as shown above. The first attempt can be made in any of the time periods above. Once an attempt is made in that time period, the subject should not be attempted again in the same period unless:

- An appointment or arrangement for a preferred callback time has been made with the subject during that time period.
- The interviewer learns through a second party that the subject, or someone more knowledgeable about the subject, will be available during that time period.
- An answering machine message indicates a time period in which to call.
- The interviewer obtained a “busy signal”. The telephone number may be **redialed at 15-minute intervals** if no appointment had been scheduled, or at **5-minute intervals** if an appointment had been scheduled.

All subsequent telephone contact attempts must be made in a time period not yet tried, until all time periods have been attempted. The sequence may be repeated until a contact has been made. Although there is a **limit of 3 calls** to the subject (or subject’s telephone number) per day, additional tracking and tracing calls may be made to alternate telephone numbers and other parties, as appropriate, in attempts to locate the subject.

When contact is made with someone who knows the subject, interviewers should try to identify a good time (and telephone number) for reaching the subject. If the subject is contacted but the time is not convenient, interviewers should request the preferred time(s) to call back. After obtaining oral informed consent, interviewers should schedule an interview appointment at a time convenient to the mother. Callbacks and appointments may be on any day, evening, or weekend hours.

Maximum number of calls to locate subjects: Usually a **maximum of 15 calls** will be made to establish contact with the mother. (This includes multiple back-up or alternative numbers for the mother such as her work number.) The maximum generally excludes tracing calls to other parties or resources such as Directory Assistance to locate the subject. If contact has been made with the subject within the 15-call maximum, then additional calls may be made for obtaining consent and conducting the interview beyond 15 calls. Multiple “busy dials” to a number during a block of time in a calling period count as only 1 call. [**Exceptions** could be made in cases where tracing procedures look promising for contacting a subject, but reason for exceptions should be documented.]

Establishing Calling Priorities of Subjects

Supervisors will set daily and monthly priorities for calling subjects so that all completed interviews will be conducted within 15 months from the EDC (or EDD) and at an average of no more than 6 months from the EDC (or EDD). (Other final outcomes such as Hard Refusals also must be obtained within this time frame.) A Glossary of terms to help understanding the priorities in the CATI tracking system appears in Attachment B of this document.

The **priority** of the subjects (or telephone numbers) in a day batch determines the sequence in which the telephone numbers will be presented to the interviewers. The priority is only of importance for subjects with an “active” status, i.e. with whom contacts and interviewing can be made. High priority subjects are dealt with first.

The Supervisor and CATI system will assign a priority to subjects based on the type of appointment that has been made and the number of calls (and dials) that have been performed. For an appointment on a specific date and time, the priority is always hard (must be dialed). For an appointment with preference for a period of a number of days, the priority is soft; unless it is the last possibility (or “last day”), in which case the priority is medium. If no appointment or an appointment without preference has been made, or if previous dials have led to the results of busy or no-answer, then the priority is default (low). Finally, appointments that have been made by the supervisor have the priority super (highest priority).

Priorities are assigned when creating the day batch (i.e., the group of subjects to be called on a given day). The soft, medium, and hard priorities are always the result of appointments with preference or of hard appointments. Priorities are adjusted during scheduling if necessary. For not-active subjects, the system determines the future priority, the priority subjects will get on activation. Based on priority, the Supervisor or CATI scheduler determines which subjects or numbers must be selected for distribution to an interviewer.

The following summarizes priorities.

<u>Situation</u>	<u>Priority</u>
Appointment made by Supervisor	8 Super
Hard appointment for date and time, busy	7 Hard-Busy
Hard appointment for date and time	6 Hard
Appointment with preference, last possibility, busy	5 Medium-busy
Appointment with preference, last possibility	4 Medium
Appointment with preference, busy	3 Soft-Busy
Appointment with preference	2 Soft
No appointment, busy	1 Default-Busy
No appointment	0 Default

The CATI system distinguishes a number of **treatment types or rules**. The type of treatment given to a number depends on the dial result. A number with the dial result “no-answer” or “answering service” will be given the no-answer treatment. Numbers with the result “busy” will be given the busy treatment, and a number with the result “appointment” will be given the appointment treatment. Other results (“disconnected/non-working”, “undecided”, and “refused to proceed”) are considered as concluded for the day. (NOTE: Undecided subjects will receive an “on-hold” treatment, and will be reassigned to a calling status by the Supervisor.)

As a general rule, all dials for a given telephone number in one time period on a given day form one call. The survey definition specifies the maximum number of dials for a call.

- No-Answer Treatment:** One call can be performed during each time period during the day until the maximum number of calls for the day is reached or there is an end result (e.g., an appointment or interview).
- Busy Treatment:** Similar to the no-answer rules but with a more defined calling strategy.
- Appointment Treatment:** The appointment rule assures that appointments will be dealt with correctly, i.e. that numbers with an appointment will be included in the day batch for the day of the appointment. An interviewer who has made an appointment using the Appointment Module can either fill in the appointment information, or it can be imported into the system.

Leaving Messages

There are no limits on the number of messages that may be left with subjects or others who may assist in contacting subjects. Call Scripts in other sections of the Interviewer Manual describe the types of messages and what to say when leaving a message.

Refusals and Undecided Schedules

Encouraging as many subjects as possible to participate is among the approaches for achieving a high participation rate.

Often, the “first” contact with a subject that concludes with the subject’s hesitancy or indecision to participate constitutes an “Undecided” response after which callbacks may be made to address the concerns that the Subject raised and encourage her to participate. After receiving the first Undecided response, interviewers generally should **wait 2 weeks to 1 month** before attempting a callback. The waiting period may vary if the Subject states a different preference for a waiting period. In situations where the baby was a TAB, stillbirth, or has died, a much longer waiting period may be appropriate (e.g., 6 months to a year) to allow time for the mother to adjust to the death. When subjects were “Undecided”, a different interviewer or Supervisor should make the follow-up call.

A subject’s second Undecided response may be a “Hard Refusal” or final refusal. No further follow-up calls or callback attempts should be made after a second Undecided response if the Subject indicates an unwillingness to be called again. “Hard Refusals” or final refusals usually consist of any calls that end in a clear statement by the Subject that she does not wish to participate under any circumstances. “Hostile Refusals” constitute another type of Hard Refusal. Hostile refusals include any statement by the Subject to never be contacted again or of an angry “hang up” by the Subject. These should be treated as a final refusal (even if occurring during the first contact with the Subject).

Sometimes distinctions may be fuzzy among coding a Subject’s response as a refusal, as reluctance or indecision, or as an “inconvenient time”. For example, the Subject may say she feels busy or overwhelmed (for any number of reasons), and could not be free to do an interview for 6 months. In such cases, the mother’s statement should be used as the guide for a callback time. Usually if the mother’s primary reason refers to a time factor (too busy or inconvenient), her response may be recorded as “inconvenient time”. Other reasons for hesitancy (that may require a delay but not a refusal) may be recorded as Undecided.

Scripts in other sections of the Interviewer Manual describe undecided and refusal responses, protocols to be followed, and what to say when handling refusals and undecided respondents.

National Birth Defects Prevention Study

Suggested Dialing and Calling Result Codes for Scheduling Contacts and Interviews**Attachment A**

The following suggested result codes* could be used to identify the status of contacting and tracing subjects for scheduling purposes. Use of these codes is optional and is not required for use by Centers. They are presented only as suggestions.

NA	No Answer
B	Busy Phone
X	Wrong Number
D	Disconnected
XX	Criss Cross Tracing
RU	Respondent Undecided (Plan to call back; formerly RS code)
RH	Hard Refusal (includes Hostile Refusal)
NH	Not Home/Not in Room
BC	Bad Connection
I	Inconvenient Time
U	Unlisted Telephone Number
O	Other
CS	Contacted Subject
PC	Partially Completed, Recall to Finish
C	Completed Interview
T	Reached Answering Machine
M	Left Message on Answering Machine (for subject or other person)
L	Left Message with Person (other than Subject)
CP	Contacted Other Person (other than Subject; no message left for subject)

* Note: Battelle used these result codes for the Atlanta Birth Defects Risk Factor Survey.

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Tracking Outcome Codes for Contact and Interview Status

Attachment B

The following outcome codes identify the status of contacting and interviewing the subjects. **Final Outcome Codes** (indicating final status or dispositions) are marked with an asterisk (*). Final outcomes indicating **Not Eligible Status** are marked with double asterisks (**). Other codes indicate **In-Process Contact Codes** for subjects at various stages of tracing and contacting. Use of these codes is optional and is not required for use by Centers. They are presented only as suggestions.

Outcome Codes from the CATI Call Screen:

INTERVIEW COMPLETED *	01
EXCLUDED, CONTACTED **	02
REFUSED	03
NO CONTACT	04
UNABLE TO INTERVIEW ON TIME *	05
EXCLUDED/MEDICAL RECORD REVIEW **	06
INTERVIEW STARTED/NOT COMPLETED	07
NO PHONE	08
EXCLUDED/NO CONTACT **	09
EXCLUDED/COMPLETED **	10
PILOT INTERVIEW	11

Outcome Codes from the Atlanta Birth Defects Risk Factor Survey (Used by Battelle):

RR	Subject Information Received (ROCR Received), Advance letter to be mailed to Mom
VC	Verifying Date of Conception, Confinement, or EDD (with the Center personnel)
LS	Letter Sent to Mom, 10-day Waiting Period (waiting to call)
WC	Waiting to Call; Letter Sent to Mom (after 10-day waiting period, no contact attempts)
SL	Spanish-Speaking Subject
UC	Unable to Contact (Phone number is available)
NP	No Phone Number, Unable to Contact (Tracing)
IP	Incorrect Phone Number, Unable to Contact (Tracing)
TC	Tracing: Subject ID sent to Center personnel for additional information; (Waiting for Feedback)
TS	Tracing: Tracing after feedback from Center personnel
LM	Left Message with Another Person or Answering Machine
IS	Contacted; Interview has been Scheduled
IN	Contacted; Interview Not Yet Scheduled (Needs to be scheduled)
RU	Respondent Undecided (Plan Callback)
RH*	Hard Refusal (No Further Attempts will be Made)
LC*	Lost to Contact/Lost to Follow-up (time frame not exhausted)
TE*	Tracing Ended (tracing efforts have been discontinued; time frame exhausted)
ND**	Not Done; tracing discontinued because subject was excluded from time frame after study began (Not Eligible, out of range)

NE** Not Eligible
NF** Not Complete; Speaks Foreign Language (other than English or Spanish)
(Not Eligible)
SD** Subject Deceased (i.e., mother of infant is deceased); (Not Eligible)
PC Interview Partially Completed; Plan to Complete (in process)
PR* Interview Partially Completed; Refused Completion
IC* Interview Complete (but not yet sent to coding)
CS* Interview Complete—Spanish (but not yet sent to coding)
QC* Questionnaire Complete & Given to Coding Department
QS* Questionnaire Complete & Given to Coding (Spanish)

National Birth Defects Prevention Study

Glossary of Terms for Using CATI Tracking Systems

Attachment C

The following terms may help understanding the priorities in the CATI tracking system. Use of these terms is optional and is not required for use by Centers. They are presented only as suggestions.

1. **Appointment Types:** The following appointment types are used for establishing priorities.
 - a. Appointment with no preference
The number will be phoned back during the survey period, but not on the day on which the appointment was made. The number will have the default priority.
 - b. Appointment for a specific date and time
For this appointment type a date and a time have to be specified. The appointment must be met at the specified time.
 - c. Appointment with preference for a certain period with part of day
This appointment type specifies two dates and two times. If the interviewer does not fill in the dates or the times, the entire survey period or the entire day will be automatically selected. The number will be called back in the specified period and time slice.
 - d. Appointment with preference for a week day with part of day
This appointment specifies one or more specific days in the week and a day part. If the days selected are Wednesday and Friday then CATI will include the number in the day batch on the first Wednesday or Friday (whichever is first) in the survey period after the day on which the appointment was made.
 - e. Appointment with preference for period
This appointment specifies two dates between which the respondent has to be phoned back.
 - f. Appointment with preference for a day in the week
This appointment specifies one or more specific days in the week. If the days selected are Wednesday and Friday, then CATI will include the telephone number in the day batch on the first Wednesday or Friday (whichever is first) in the survey period after the day on which the appointment was made.
 - g. Appointment with preference for a part of the day
This appointment specifies two times in the day between which the respondent wants to be phoned back. The respondent can be phoned back on any day in the survey period except the day on which the appointment is made.
2. **Busy Dial:** A busy dial is a dial that is performed if the number is busy. A number of busy dials together form one call. The idea is that a number that is busy should quickly be dialed again: there is a good chance to make contact, as somebody seems to be at home. It may be, however, that the receiver is off the hook. So it is wise to stop trying to contact a busy number after a specified maximum number of busy dials. If this happens the number of dials for the number is increased and the system tries to contact the number again later (unless the number has had the maximum number of calls and it is not an appointment). Using busy dial intervals you can specify how long the scheduler has to wait between consecutive busy dials.

3. **Calls:** A call is a set of logically related dials. A maximum number of dials can be performed for each call. This maximum is specified in the survey definition. In principle, a number can only be subjected to three calls on a given day. However, a number can have more than three calls on a day, for instance, if an appointment has been made for the same day. The maximum number of calls for a telephone number is specified in the survey definition. This maximum is ignored if an appointment was made for the number.
4. **Day Batch:** A day batch is a collection of telephone numbers selected to be called on a given day in the survey period. A Supervisor must create a day batch in order for the interviewers to be able to work with the CATI.
5. **Dials:** A dial is the selection of one telephone number and making it available to the interviewer to try to get a respondent on the line. After conclusion of the dial, the number acquires a dial result.
6. **Dial Results:** A dial result is the result that has been registered for a dial. A dial result determines what treatment should be given to a number selected by an interviewer.
7. **Future Priority:** The future priority is the priority the number will have at activation time. The future priority is established after the conclusion of a dial and stored in the day batch.
8. **Intervals:** An interval is a unit of 5 minutes. CATI divides the day in 288 intervals. The intervals are numbered from 1 to 288. Each interval is bound by two times, its starting time and its ending time. For example, interval 1 is bound by 00:00 and 00:05, interval 288 by 23:55 and 24:00 and interval 100 by 08:15 and 08:20. In CATI all time operations are performed in intervals.
9. **Last Possibility:** The term “last possibility” applies to numbers for which an appointment with preference (i.e. not a hard appointment) has been made. For numbers with a period appointment the last possibility is the last day in the appointment period. For numbers with a weekday appointment the last possibility is the last weekday as specified in the appointment in the survey period. For numbers with a day part appointment the last possibility is the last day in the survey period.
10. **Scheduling:** Scheduling is the activity by which telephone numbers in the day batch are made available (or not available) to be dialed. The part of the program that performs this function is called the scheduler. The scheduler judges the priority and the status of the telephone numbers in the day batch and adjusts them if necessary. Scheduling is performed at most once in every interval.